

IN THE CLAIMS

1. (Currently Amended) A method of making an intravascular catheter by securing a polymeric member to a metallic member in a high strength fluid tight relationship, comprising:

- a) mounting the polymeric member against the metallic member;
- b) mounting a heat shrinkable collar about said polymeric member; and
- c) applying heat ~~such that said heat shrinkable collar causes~~ directly to said collar so as to cause said collar to shrink and hot press the polymeric member to be hot pressed against the metallic member at a temperature above the glass transition temperature and below the melting point of the ~~polymeric material of the polymeric member while being subjected to plastic deformation.~~

2. (Previously Amended) The method of claim 1 wherein the polymeric member is a tubular element with an inner lumen extending therethrough and at least part of the metallic member is disposed within the inner lumen of the polymeric member and the heat shrinkable collar surrounds only the portion of the polymeric member that surrounds the metallic member within the inner lumen.

3. (Previously Amended) The method of claim 1 wherein the polymeric member comprises a thermoplastic polymer selected from the group consisting of polyetheretherketone, polyetheramide, polyphenylene sulfide and polysulfone, and including causing the temperatures of both the polymeric and metallic members to increase to a temperature above the glass transition temperature of the thermoplastic polymer.

4. (Canceled)

5. (Previously Amended) The method of claim 1 wherein the heat shrinkable collar is removed after heat has been applied.

6. (Canceled)

7. (Previously Amended) The method of claim 1 wherein the heat shrinkable collar is formed of a fluoropolymer.

8. Claims 8-15 (Canceled)

16. (Currently amended) A method of making an intravascular catheter with an elongated shaft, by securing a polymeric member to a metallic tubular element in a high strength fluid tight relationship, comprising:

- a) mounting the polymeric member against the metallic tubular member so that the polymeric tubular member is in contact with a surface of the metallic tubular member; ~~and~~
- b) mounting a heat shrinkable collar about said polymeric member; and
- c) applying heat ~~such that said heat shrinkable collar causes~~ directly to said collar so as to cause said collar to shrink and hot press the polymeric member ~~to be hot pressed~~ against the metallic member at a temperature above the glass transition temperature and below the melting point ~~of the polymeric material~~ of the polymeric member, so that the polymeric member is bonded to the surface of the metallic tubular member by a hot pressed bond, wherein the polymeric tubular member has a deformed section defined by the hot pressed bond, and a nondeformed section longitudinally adjacent to the deformed section and disposed about the surface of the metallic tubular member.

17. Claims 17-18 (Canceled)

19. (Previously Added) The method of claim 5, further comprising disposing a masking layer between said polymeric member and said heat shrinkable collar before the application of heat.

20. (Previously Added) The method of claim 16 wherein the heat shrinkable collar is removed after heat has been applied.

21. (Previously Added) The method of claim 20, further comprising disposing a masking layer between said polymeric member and said heat shrinkable collar before the application of heat.